

DOCUMENT RESUME

ED 335 564

CG 023 557

AUTHOR Allen, Mary J.; Scrams, David J.
TITLE Careers of Undergraduate Psychology Alumni.
SPONS AGENCY California State Univ., Bakersfield.
PUB DATE Aug 91
NOTE 23p.; Paper presented at the Annual Convention of the American Psychological Association (99th, San Francisco, CA, August 16-20, 1991).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Alumni; Careers; Curricula Evaluation; Followup Studies; Graduate Surveys; Higher Education; Income; *Job Satisfaction; Program Evaluation; *Psychology; Sex Differences
IDENTIFIERS *California State University System

ABSTRACT

This study examined careers, income, job satisfaction, and ratings of important work skills among psychology alumni of the California State University (CSU) system. Data were obtained from psychology alumni (N=395) who graduated between 1949 and 1988 from eight independent CSU campuses. Service, organization, and general culture careers accounted for 88 percent of the alumni. Although male and female alumni were just as likely to enter social careers, women alumni were more likely to enter conventional occupations. Men and women did not differ in reported job satisfaction; however, a graduate degree was significantly related to greater job satisfaction among women. A graduate degree was significantly related to greater job satisfaction only among alumni in social and conventional careers. Incomes were significantly higher for men, for those with graduate degrees, and for those in enterprising careers. Alumni rated their employment preparation as fair, but estimated their employer's opinion on the quality of the degree as good. Regarding skills important to their careers, alumni rated interpersonal skills the highest. High ratings were also given to basic skills (reading, writing, and logical reasoning) and people management skills. Results indicated that most psychology majors did not enter careers in clinical psychology, but they did develop satisfying careers that require a variety of skills which were appropriately included in the undergraduate psychology curriculum.
(LLL)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

This document has been reproduced as
received from the person or organization
originating it

Minor changes have been made to improve
reproduction quality

Points of view or opinions stated in this docu-
ment do not necessarily represent official
OERI position or policy

Careers of Undergraduate Psychology Alumni

Mary J. Allen and David J. Scrans

California State University, Bakersfield

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

Mary J. Allen

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

Paper presented at the Ninety-Ninth Annual Convention of the
American Psychological Association, San Francisco, August, 1991

Abstract

Careers, job satisfaction, income, and ratings of important work skills were examined in 395 psychology alumni (62% female and 88% white) who graduated between 1949 and 1988. Psychology alumni are satisfied with a variety of careers and report the importance of a broad range of skills that are appropriately incorporated in the undergraduate curriculum.

Preparation of this article was supported in part by grants from Academic Program Improvement (API), Chancellor's Office, California State University and the University Research Council, California State University, Bakersfield to the Applied Research Center, California State University, Bakersfield.

We gratefully acknowledge the assistance of Gwynn Mayeaux in the data coding.

BEST COPY AVAILABLE

Careers of Undergraduate Psychology Alumni

Undergraduate psychology programs offer students training that prepares them for a variety of occupations (Lunneborg, 1985; Lunneborg & Wilson, 1982; Ware & Meyer, 1981). However, there seems to be a bias toward clinical aspirations among students (Korn & Lewandowski, 1981; Malin & Timmreck, 1979; Titley & Titley, 1982). This clinical focus is unrealistic for many students because many will be unable to receive graduate clinical training (Korn & Lewandowski, 1981). The reported percentage of alumni pursuing graduate degrees, in all areas of psychology, varies from about 23% (Colorado State class of 1977; Titley, 1978) to 60% (Creighton University classes of 1973 to 1978; Ware & Meyer, 1981). McGovern and Carr (1989) reviewed earlier survey results and found that from 41 to 70% of undergraduate alumni begin employment upon graduation, mostly in business and social service settings. Clearly, undergraduate psychology majors should consider a variety of career options beyond clinical psychology.

Some insist that the solution to this problem lies in the hands of academic advisers (Korn & Lewandowski, 1981; Titley & Titley, 1982). Korn and Lewandowski argue that the clinical bias is directly related to the societal image of "psychologist as psychotherapist" (1981, p. 151) and place the burden of its solution on undergraduate instructors who should present non-clinical occupational opportunities during classes and advising sessions. It is important that undergraduate students and their faculty and advisers have realistic expectations based on empirical data so that students can make informed career judgments. Titley and Titley (1982) recommend establishing a data base for this purpose, including alumni careers, incomes, and job satisfaction, as well as information on course patterns which lead to career options. Lunneborg (1985) agrees that job satisfaction is an important variable to include if we are to provide useful information.

Lunneborg and Wilson (1982) analyzed the occupations of 1977 to 1979 University of Washington psychology alumni 6 months to 2 years after they graduated. They used Roe's (1956) classification system which divides careers into eight groups based on their primary focus: service, business contact, organization, technology, outdoors, science, general culture, and arts and entertainment. Each category is more closely related to the adjacent categories, and the model is circular, with arts and entertainment being as closely

related to service as it is to general culture. Percentages of alumni in the eight categories were 29, 11, 27, 10, 1, 6, 13, and 3, respectively (Lunneborg & Wilson, 1982). Lunneborg (1985) replicated the study using only 1978 to 1979 psychology alumni after several more years had passed. The percentages of alumni working in the categories were 24, 7, 30, 11, 0, 12, 14, and 1, respectively (Lunneborg, 1985). Psychology majors tend to find employment in service, organization, and general culture occupations (Cates, 1973; Lunneborg, 1985; Lunneborg & Wilson, 1982). Lunneborg and Wilson (1982) found that psychology alumni who worked in business contact and general culture jobs reported the most job satisfaction, and those who held organizational and technical jobs reported the least. However, in Lunneborg's (1985) replication, alumni in technical careers, along with those in general culture and scientific careers, reported the most satisfaction, and alumni who were employed in organizational jobs remained the least satisfied.

Holland (1966) devised an alternative career classification system that divides occupations into six categories (realistic, investigative, artistic, social, enterprising, and conventional); and, like Roe's, the model is circular. Zytowski (1986) describes the similarities between the two systems, arguing that four of Holland's categories have direct equivalents in Roe's system, while each of his other two categories incorporates two of Roe's. This relationship is represented in Figure 1.

Surveys of psychology alumni show that, compared to women, men are more likely to enter careers in business, less likely to enter social service professions, and more likely to enter doctoral programs (Titley, 1978; Ware & Meyer, 1981). Despite this, Lunneborg and Wilson (1982) found no gender difference in career satisfaction.

This study examines careers, income, and job satisfaction among psychology alumni of the California State University (CSU) system. In order to provide insight into the tie between curriculum and career, reports of the skills used in these careers, ratings of the undergraduate program's quality for career preparation, and perspectives on employer satisfaction with the major are analyzed.

Method

Data were obtained from 480 psychology alumni who graduated between 1949 and 1988 from eight independent CSU campuses. From 35 to 55 alumni from each campus responded to the survey. The CSU system consists of 20 campuses and currently enrolls over

365,000 students. The eight selected campuses represent all major geographical areas in the state.

Contacts on each of the campuses, who were guaranteed campus and respondent confidentiality, generated a list of names and addresses of all known alumni. Random samples were drawn from each campus, and alumni were contacted at least twice, first with a cover letter and questionnaire, then with a follow-up postcard. If fewer than 50 questionnaires were returned from a campus, a replacement sample was drawn and contacted. The estimated return rate is 28%. (This estimate is conservative because the number of letters that were not received because of address and name changes could not be calculated.)

Questionnaires collected information on demographics and employment. Respondents rated the "Quality of courses in preparing me for employment" using a Likert scale ranging from "Poor" (1) to "Excellent" (4). They were also asked "Which of the following best represents how your employers feel about your A.B. degree?" The four possible responses ranged from "It is a degree of poor quality" (1) to "It is a degree of excellent quality" (4). Job satisfaction was assessed by the question "How do you feel about the responsibilities and duties of your present job?" Responses ranged from "Very dissatisfied" (1) to "Very satisfied" (4). They were also asked to rate each of seven skills (reading, writing, statistics and/or math, logical reasoning, computer use, interpersonal skills, and people management) in response to the question "Since graduating, which of the following skills do you consider important in the work you have done?" The four available categories ranged from "Of no importance" (1) to "Very important" (4).

Alumni with reported incomes below \$12,000 ($n = 85$) were excluded to reduce the chance of including respondents who were employed part-time. (The survey failed to ask if the salary was based on full- or part-time employment.) The 395 remaining respondents were 62% female and 88% white, with a mean age of 36.06 ($SD=8.99$) and estimated mean age at graduation of 27.58 ($SD=7.67$). Approximately 20% of the alumni graduated in each of these time periods: 1949-1974, 1975-1978, 1979-1981, 1982-1984, 1985-1988; and most (94%) graduated after 1970.

Results

The mean rating for the quality of courses in preparation for employment was 2.19 ($SD=.90$). Alumni ratings of the employers' opinion of the quality of the degree had a mean of 2.88 ($SD=.63$). A

one-way repeated measures analysis of variance showed that alumni rated the seven work-related skills significantly differently, $F(6, 2106) = 186.50, p < .0001$. The mean ratings for the seven skills were: interpersonal skills, 3.90 ($SD = .36$); people management, 3.75 ($SD = .58$); writing, 3.74 ($SD = .55$); reading, 3.71 ($SD = .55$); logical reasoning, 3.68 ($SD = .55$); statistics and/or math, 2.89 ($SD = .85$); and computer use, 2.89 ($SD = .97$). Post hoc analyses using Tukey's HSD test with $p = .05$ showed three homogeneous subsets: (a) interpersonal skills; (b) people management, writing, reading, and logical reasoning; and (c) statistics and/or math and computer use.

Roe classifications were made by two independent raters. Disagreements were resolved by comparing the job classification to the classification of similar jobs in the literature and then reviewing the choices with a third researcher. Approximately 5% of the alumni were students ($n = 20$), so they could not be classified into career categories. In addition, we were unable to categorize about 5.5% of the responses ($n = 22$), such as "advocate," "self-employed," and "whatever I can get" because the exact nature of the job was unclear. Among the classified careers ($n = 353$), the percentages of alumni in the eight Roe categories were 38, 5, 36, 1, 1, 4, 14, and 1, respectively. A complete listing of all classified occupations is given in Tables 1 and 2. A chi square goodness-of-fit test comparing our percentages to those reported by Lunneborg and Wilson (1982) was significant, $\chi^2(7, n=353) = 69.17, p < .005$. We had a higher percentage of alumni with careers in service and organization (38 vs. 29%, 36 vs. 27%, respectively) and a lower proportion of alumni with careers in business and technology (5 vs. 11%, 1 vs. 10%, respectively).

Because so few of our alumni were in several of the occupational categories, groupings were collapsed into five clusters for further analyses. Using Roe's (1956) system, the five collapsed categories are service ($n = 134$), business contact ($n = 16$), organization ($n = 16$), a technical cluster (technical, outdoor, science; $n = 22$), and a combination of general cultural and arts and entertainment ($n = 55$). These categories correspond to Holland's (1966) classifications: social, enterprising, conventional, a combination of realistic and investigative, and artistic. For simplicity, the Holland nomenclature will be used.

Gender was significantly related to career category, $\chi^2(4, n=352) = 16.52, p < .05$, and to highest degree earned, $\chi^2(2, n=390) = 7.43, p < .05$. The highest degree earned was also significantly related to career category, $\chi^2(8, n=335) = 59.58, p < .0001$. Careers were significantly different for alumni who graduated prior to 1980

and those who graduated in the 1980s, $\chi^2(4, n = 351) = 9.97, p < .05$. Results are provided in Tables 3 and 4.

Two three-way analyses of variance examined the effects of career category, gender, and highest degree earned (bachelors vs. graduate degree) on job satisfaction and income (in thousands). For the analysis of job satisfaction, there was a significant main effect for degree ($F(1, 315) = 5.17, p < .05$) and two significant two-way interactions: sex by degree ($F(1, 315) = 7.39, p < .01$) and career category by degree ($F(4, 315) = 2.40, p = .05$). Descriptive statistics for the various groups are given in Table 5. Tests for simple main effects showed that a graduate degree was associated with significantly higher job satisfaction among women ($p < .01$), but not among men, and among those in social ($p < .05$) and conventional ($p < .01$) careers, but not other types of careers.

For the analysis of income, there were significant main effects for all three variables ($F(1, 315) = 15.65, p = .001$ for gender; $F(4, 315) = 6.26, p = .001$ for career category; and $F(1, 315) = 18.57, p = .001$ for degree) and a significant interaction between gender and career category, $F(4, 315) = 2.69, p < .05$. Alumni who had bachelors degrees averaged 28.43 ($SD = 19.58$), while those who held advanced degrees reported an average annual income of 35.91 ($SD = 17.89$). Means and standard deviations showing the effects of gender and career category are given in Table 6. Post hoc analyses showed that those in enterprising careers earned more than those in each of the other careers (Tukey's HSD test, $p < .05$); and tests for simple main effects revealed that men earned significantly more than women in social ($p < .05$), enterprising ($p < .01$), and conventional careers ($p < .05$).

Nine two-way analyses of variance examined the effects of career category and gender on ratings of the quality of the undergraduate program for career preparation, alumni estimates of the ratings of the quality of the undergraduate program by their employers, and the seven questions on the importance of skills used in their career. There were no significant effects on quality of the degree for employment, but there was a significant main effect for career category on employer attitudes, $F(4, 279) = 4.46, p < .005$. Means were 2.99 ($SD = .56$) for social careers, 2.36 ($SD = .81$) for enterprising careers, 2.79 ($SD = .63$) for conventional careers, 2.88 ($SD = .60$) for realistic/investigative careers, and 2.98 ($SD = .64$) for artistic careers. Tukey HSD post hoc analyses using $p = .05$ showed that alumni in social, artistic, and realistic/investigative careers reported employer ratings significantly higher than those in enterprising careers.

There were no significant effects on two of the skills: logical reasoning and interpersonal skills. The five career groups differed in their reported use of the other skills: $E(4,335)=3.09$, $p<.05$ for reading; $E(4,335)=3.09$, $p<.05$ for writing; $E(4, 335)=3.46$, $p<.01$ for using statistics and/or math; $E(4, 336)=19.51$, $p=.001$ for computer use; and $E(4, 336)=3.63$, $p<.01$ for people management. Means and standard deviations are provided in Table 7. There were no significant main effects for gender and no significant interactions. Post hoc analyses using Tukey's HSD tests with $p=.05$ revealed that those in artistic careers rated the importance of reading in their careers significantly higher than those in enterprising careers; those in artistic, social, and conventional careers rated the importance of writing significantly higher than those in enterprising careers; those in realistic/investigative careers rated the importance of statistics and/or mathematics significantly higher than those in enterprising careers; those in conventional careers rated the importance of computer use significantly higher than those in realistic/investigative and social careers and those in artistic careers reported computer use as significantly more important than those in social careers; and those in enterprising, artistic, and social careers rated the importance of people management skills significantly higher than those in realistic/investigative careers.

Discussion

As in previous research (Cates, 1973; Lunneborg, 1985; Lunneborg & Wilson, 1982), our alumni tended to find careers in service, organization, and general culture careers. These three categories accounted for 88% of our alumni. Our sample had higher percentages in service and organizational careers than found by Lunneborg and Wilson (1982). Comparisons of our earlier and more recent alumni suggest that increased participation in organizational careers is a trend among psychology alumni, perhaps reflecting increasing career opportunities in this job sector for our graduates. Over half of the alumni with graduate degrees entered service careers, while nearly half of those with bachelor's degrees entered organizational careers. It is especially important that psychology majors who do not anticipate or qualify for graduate training consider non-clinical careers.

Previously found gender differences in graduate school completion and entrance into business careers (Titley, 1978; Ware & Meyer, 1981) were replicated; and, although our male and female alumni were just as likely to enter social careers, our women alumni

were more likely to enter conventional occupations. As previously found (Lunneborg & Wilson, 1982), men and women did not differ in reported job satisfaction. However, gender did interact with graduate school completion. A graduate degree was significantly related to greater job satisfaction among women, but not among men. Perhaps the extra credentials allowed women career opportunities that are closed to them because of traditional stereotypes.

Job satisfaction was also affected by the interaction between graduate school completion and career category. A graduate degree was significantly related to greater job satisfaction only among alumni in social and conventional careers. Lunneborg and Wilson, (1982) and Lunneborg (1985) found the least job satisfaction among alumni in conventional careers; however, our interaction suggests that this is only true among alumni without graduate degrees. A graduate degree may permit career ladders in social and conventional careers that are not available to others, so should be highly recommended to students entering these professions.

Incomes were significantly higher for men, for those with graduate degrees, and for those in enterprising careers. Men earned significantly more than women in social, enterprising, and conventional careers. Students desiring higher paying careers should be advised to earn a graduate degree and/or enter enterprising careers; but women should be advised that female alumni in enterprising careers reported the lowest average income. With the exception of enterprising careers for men, average incomes did not differ across career categories, so job satisfaction data are more relevant to decisions concerning careers outside of the enterprising cluster. Most careers held by psychology alumni with bachelor's degrees did not differ in job satisfaction; but women and those entering social or conventional careers appear most satisfied if they have completed a graduate degree. Knowing that a graduate degree also leads to higher income may soften the sacrifices made when pursuing graduate training.

Alumni ratings of the quality of the degree for employment preparation averaged 2.19 ("fair") and did not vary with career or gender. Perhaps this reflects the academic focus of most undergraduate programs. We are not in the business of providing job training to undergraduate psychology majors, and our alumni are aware of this. However, alumni average 2.88 ("good") when they estimate their employer's opinion on the quality of the degree. Perhaps alumni realize that employers appreciate broadly and technically trained employees. This appears to be especially true for

alumni in social, artistic, and realistic/investigate careers, but was not true for those in enterprising careers.

What skills have the alumni found important in their careers? On a 4-point scale, the seven examined skills averaged from 2.80 ("somewhat important") to 3.90 ("very important"). Interpersonal skills are rated the highest. High ratings were also given to basic skills (reading, writing, and logical reasoning) and people management skills; and lower, but still reasonably high ratings were given to statistics and/or mathematical skills and computer use. Results suggest that psychology departments should offer a curriculum that covers these skills for all undergraduate majors.

While the importance of logical reasoning and interpersonal skills did not vary with career, the other skills did vary with occupational category. Those in social careers gave especially high ratings for the importance of writing and people management skills and also gave high ratings to reading skills, as would be expected in careers involving case management. Those in enterprising careers stressed the importance of people management skills. Those in conventional careers rated all the skills as somewhat or very important, and nearly half of the alumni who did not complete graduate degrees and over 40% of those who graduated in the 1980s were in this job cluster. Those with realistic/investigative careers gave lower ratings only to computer use, and they gave unusually high ratings to statistics and/or mathematics. Computer use was rated higher by those in conventional and artistic careers, suggesting word processing, record keeping, and graphics may be typical computer uses. Those in artistic careers also reported the high importance of reading, writing, and people management skills.

Psychology alumni are quite satisfied with their jobs (averaging 3.22 on a 4-point scale), and this was especially true among women with graduate degrees and alumni in social and conventional careers with graduate degrees. With the exception of men in enterprising careers, most career groups reported similar average incomes. Most alumni report that their employers value their undergraduate training, even though the alumni only view their bachelor's degree as providing "fair" employment preparation. Results clearly indicate that most psychology majors do not enter careers in clinical psychology, but they do develop satisfying careers that require a variety of skills that are appropriately included in the undergraduate psychology curriculum.

References

- Cates, J. (1973). Baccalaureates in psychology: 1969 and 1970. American Psychologist, 28, 262-264.
- Holland, J. L. (1966). A psychological classification scheme for vocations and major fields. Journal of Counseling, 13, 278-288.
- Korn, J. H., & Lewandowski, M. E. (1981). The clinical bias in the career plans of undergraduates and its impact on students and the profession. Teaching of Psychology, 8, 149-152.
- Lunneborg, P. W. (1985). Job satisfactions in different occupational areas among psychology baccalaureates. Teaching of Psychology, 12, 21-22.
- Lunneborg, P. W., & Wilson, V. M. (1982). Job satisfaction correlates for college graduates in psychology. Teaching of Psychology, 9, 199-201.
- Malin, J. T., & Timmreck, C. (1979). Student goals and the undergraduate curriculum. Teaching of Psychology, 6, 136-139.
- McGovern, T. V., & Carr, K. F. (1989). Carving out the niche: A review of alumni surveys on undergraduate psychology majors. Teaching of Psychology, 16, 52-57.
- Roe, A. (1956). The psychology of occupations. New York: Wiley.
- Titely, R. W. (1978). Whatever happened to the class of '67? American Psychologist, 33, 1094-1098.
- Titely, R. W., & Titely, B. S. (1982). Academic advising: The neglected dimension in designs for undergraduate education. Teaching of Psychology, 9, 45-49.
- Ware, M. E., & Meyer, A. E. (1981). Career versatility of the psychology major: A survey of graduates. Teaching of Psychology, 8, 12-15.
- Zytowski, D. G. (1986). Comparison of Roe's and Holland's occupational classifications: Diverse ways of knowing. Journal of Counseling Psychology, 33, 479-481.

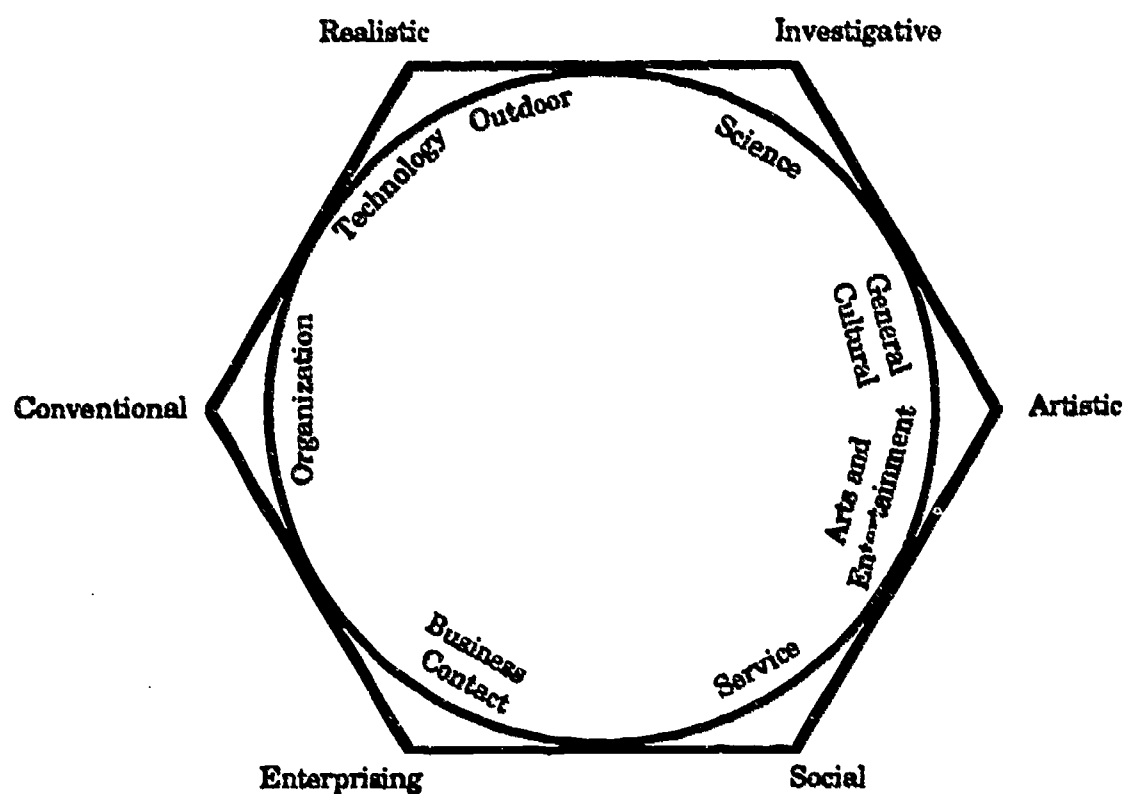


Figure 1. Graphic comparison of Roe's and Holland's classification systems. Adapted from Zytowski, D. G., 1986, *Journal of Counseling Psychology*, 33, p. 480.

Table 1

Occupations Held by Male Respondents in Each Roe Category^a

Service			
<u>Bachelor's Degrees</u>			
Bartender	Drug	Law	National Guard
Career Adviser	Counselor(?)	Enforcement	Psychiatric
Child Support	Firefighter	Officer	Technician
Officer	Half-way House	Letter Carrier	Recreation
Counselor/	Program	Mental Health	Therapy
Therapist(2)	Coordinator	Worker	Social Work(2)
Criminal			
Investigator			
<u>Master's Degrees</u>			
Airport Worker	Health Ed.	School	Smoking &
Clinician	Administrator	Counselor	Weight
Counselor(2)	MFCC(4)	School	Counselor
Drug	Parole Agent	Psychologist	Social Worker
Counselor(2)		(6)	(5)
<u>Doctorate Degrees</u>			
Clinician(3)	Counselor	Psychologist(3)	Therapist(2)

Business Contact			
<u>Bachelor's Degrees</u>		<u>Master's</u>	
Car Salesman	Marketing(2)	Real Estate	Salesperson
Insurance		Agent(3)	
Agent (2)			

Table Continues

Organization
Bachelor's Degrees

Accountant(2)	County	Investment	Systems
Administrative	Government	Banker	Analyst
Assistant	Customer	Manager-9	Testing
Auditor	Engineer	Public Relations	Administrator
Business Owner	Insurance	Supervisor	United Parcel
Claims	Underwriter		Service
Adjuster(2)			

Master's Degrees

Administrator	Hotel Staff	Infantry Officer	Transfer Center
Businessperson	Operations	Manager(2)	Director
Mental Health	Human	Marketing	TV Producer
Director(2)	Resources	Research	

TechnologyBachelor's Degrees

Building Contractor

Master's Degrees

Avionics Technician

OutdoorsBachelor's DegreesCommercial Gardener
FisherMaster'sFish & Game
OfficerDoctorateEnvironmental
Analyst

 Table Continues

Science

<u>Bachelor's Degrees</u>		<u>Master's Degrees</u>	
Dental Technologist	Technical Assistant	Research Chemist	Statistician X-Ray Tech.
	(2) Vascular Technologist	Research Psych Phys Tech	<u>Doctorate</u> Optometrist
Dispensing Optician			

General Culture

<u>Bachelor's</u>	<u>Master's</u>	<u>Doctorate</u>
Minister/ Pastor(2) Teacher(7)	Administrator(3) Minister School Principal Teacher(2)	Attorney Teacher University Dean University Professor(2)

Arts and Entertainment

Bachelor's Degrees

Actor	Author	Numismatist
-------	--------	-------------

^aNumbers in parentheses indicate the number of cases, if more than one.

Table 2

Occupations Held by Female Respondents in Each Roe Category^a

Service			
<u>Bachelor's Degrees</u>			
Aerobics Instructor	Customer Support	Hair Dresser(2) Health Practitioner	Physical Therapist
Bartender	Day Care	Jail Worker	Probation Officer(3)
Bus Driver	Drug Counselor(2)	Maintenance Engineer	Social Work(7)
Career Counselor(4)	Financial Consultant	Mental Health Worker	Spiritual Counseling Therapist(2)
Community Health Worker Counselor(8)	Flight Attendant		Travel Agent
<u>Master's Degrees</u>			
Career Counselor(3)	Genetic Counselor	Psychologist(3) Public Health Consultant	School Counselor(2)
Clinician Counselor(1)5	Metaphysical Counselor	Therapist(6)	School Psych.(8)
Educational Therapist			Social Worker(2)
<u>Doctorate Degrees</u>			
Clinician(2)	Psychologist(2)	School Psychologist	

Business Contact			
<u>Bachelor's Degrees</u>			
Salesperson(2)	Insurance Salesperson	Political Fundraiser	Real Estate Agent(2)

Table Continues

Organization

Bachelor's Degrees

Accountant(6)	Computer	Logistics	Property
Administrator	Program.(3)	Analyst	Management
(7)	Credit/Finance	Manager(11)	Public Relations
Advertising(2)	Data Base	Marketing(3)	Receptionist(4)
Appraiser	Analyst	Media Manager	Recreation
Auditor	Financial Aid	Medical	Director
Banker(2)	Officer	Transcription	Sales Clerk
Business	Grocery	Naval Officer	Sales Rep.(2)
Owner(2)	Clerk(2)	Organizational	Supervisor
Buyer	Insurance	Development	Supply
Claims	Processor(2)	Personnel	Technician
Adjuster(3)	Job Placement	Officer(6)	Word
Clerk(5)	Director	Program	Processing(2)
	Job Specialist	Coordinator(2)	

Master's Degrees

Accountant	Manager(2)	Secretary(2)	Personnel
Business Owner	Mental Health	Naval Officer	Officer(6)
Commodity	Director(2)		Program
Broker			Director

Technology

Bachelor's Degrees

Machinist/Welder

Outdoors

Bachelor's Degrees

Agricultural Field Assistant

Science

Bachelor's Degrees

Medical	Neuroscience
Assistant	Researcher
	Nurse(5)

Master's Degrees

Research	Assistant
Scientist	Curator

Table Continues

General Culture

<u>Bachelor's Degrees</u>		<u>Master's</u>	<u>Doctorate</u>
Legal Assistant	Recruiter	Attorney	Attorney
Legal Technician	School Administ.(2)	Librarian	Law Clerk
Library Specialist	Teacher(14)	Minister	Teacher(3)
		Program Advisor	
		Teacher(4)	

Arts and Entertainment

Bachelor's: Writer/Editor

^aNumbers in parentheses indicate the number of cases, if more than one.

Table 3

Percentage of Gender, Education, and Recency of Graduation Groups
in Career Categories

Career	Gender ^a		Education ^b			Graduation Year ^a	
	Male	Female	BA	MA	Ph.D.	49-79	80-88
Social	38	38	26	56	54	37	38
Enterprising	8	2	7	1	0	5	4
Conventional	27	41	47	24	0	29	42
Real./Invest.	11	4	6	6	8	9	4
Artistic	17	15	14	13	38	19	13
n	133	219	208	117	26	163	188

^asignificantly related to career, $p < .05$.

^bsignificantly related to career, $p < .0001$.

Table 4

Percentage of Gender Groups Receiving Degrees

Degree	Gender ^a	
	Male	Female
Bachelor's	51	63
Master's	38	32
Doctorate	11	5
n	147	243

^asignificantly related to degree earned, $p < .05$.

Table 5

Means (and Standard Deviations) of Job Satisfaction Ratings
for Gender, Career, and Education Groups

Group	Highest Degree Earned	
	Bachelors	Graduate
Gender		
Men	3.30 (.78)	3.28 (.68)
Women	3.01 (.84)	3.46 (.75)
Career		
Social	3.11 (.85)	3.46 (.74)
Enterprising	3.14 (.77)	3.00 (0)
Conventional	2.98 (.88)	3.44 (.70)
Real./Inv.	3.08 (.90)	3.11 (.93)
Artistic	3.48 (.51)	3.16 (.55)
Overall	3.10 (.83)	3.38 (.72)

Table 6

Means (and Standard Deviations) of Incomes for Gender and Career Groups

Career	Gender		Total
	Men	Women	
Social	35.20 (21.88)	27.88 (13.19)	30.76 (17.43)
Enterprising	64.90 (55.35)	24.80 (7.33)	51.53 (48.66)
Conventional	37.14 (18.68)	28.41 (16.94)	30.97 (17.84)
Real./Inv.	30.75 (10.91)	27.57 (7.59)	29.58 (9.71)
Artistic	34.64 (13.30)	26.38 (7.30)	29.74 (10.87)
Total	37.52 (24.40)	27.79 (13.94)	

Table 7

Means (and Standard Deviations) of Skills Used in Career Categories

Skill	Career Category				
	Soc.	Ent.	Con.	Real./Inv.	Art.
Reading*	3.69 (.58)	3.33 (.72)	3.70 (.55)	3.62 (.74)	3.88 (.34)
Writing*	3.75 (.58)	3.27 (.88)	3.75 (.55)	3.62 (.67)	3.86 (.36)
Statistics**	2.68 (.82)	2.53 (.92)	2.98 (.86)	3.14 (.73)	3.00 (.90)
Computer Use***	2.40 (.97)	2.73 (1.16)	3.36 (.71)	2.52 (.81)	3.00 (.90)
People Management*	3.84 (.46)	4.00 (0)	3.72 (.59)	3.48 (.81)	3.86 (.45)

* $p < .05$. ** $p < .01$. *** $p = .001$.